

We claim:

1. An apparatus for evaluating a semiconductor wafer comprising:
an optical inspection system including at least one or more of the type selected
5 from the group consisting of a spectrophotometer, a spectroscopic ellipsometer and a
narrow band ellipsometer; and
a cleaning system operatively coupled to the optical inspection system, said
cleaning system including at least or more of the modalities selected from the group
consisting of microwave excitation, radiant heating, conductive heating and optical
10 radiation, said cleaning system functioning to reduce contaminants on the wafer so
that the analysis of the wafer by the optical inspection system can be more accurate.
2. An apparatus as recited in claim 1, wherein the optical inspection system and
the cleaning system are located in adjacent but separate modules.
15
3. An apparatus as recited in claim 2, further including a wafer transport module
coupled to the cleaning module and the optical inspection module which operates to transport
a wafer cleaned by the cleaning module to the optical inspection module.
- 20 4. An apparatus as recited in claim 1, wherein the optical inspection system and
the cleaning system are located in the same chamber.
5. An apparatus as recited in claim 4, wherein the optical radiation used for the
cleaning system is defined by UV radiation.
25
6. An apparatus as recited in claim 1, wherein the optical radiation used for the
cleaning system is defined by UV radiation.
7. An apparatus as recited in claim 1, wherein the cleaning system includes a
30 conductive heat source.